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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,276	05/11/2001	Randall D. Blanchard	LITD:0013	5871

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EXAMINER

RUDE, TIMOTHY L

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/853,276

Applicant(s)

BLANCHARD, RANDALL D.

Examiner

Timothy L Rude

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-- Th MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 4,8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

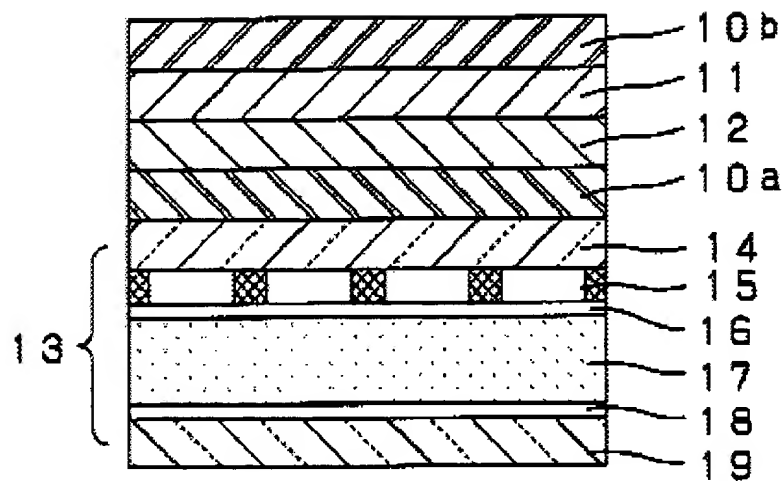
(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

1. Claims 1, 2, 5, 11, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Hatanaka et al (Hatanaka) USPAT 6,130,735.

As to claims 1, 2, 5, 11, and 15, Hatanaka discloses in Embodiment 2 (col. 7, line 35 through col. 8, line 20) and Figures 1-3, a liquid crystal display (LCD) comprising:

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Fig. 1

a liquid crystal cell display screen, 13;

a polarizer, 11 (Applicant's transparent panel), having a backside and an anti-glare front surface configured to diffuse ambient light comprising an anti-reflective layer disposed on the anti-glare front surface (col. 8, lines 1-6); and

a front scattering film layer, 10a (Applicant's bulk diffuser), wherein the bulk diffuser comprises a diffusive material configured to diffuse light within the diffusive material (col. 7, lines 49-67), disposed between the display screen, 13, and the backside, wherein the bulk

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diffuser is bonded (col. 7, lines 65-67 and col. 8, lines 3-7) to the display screen and the transparent panel, and

the bulk diffuser is configured to diffuse image light of the display (col. 7, lines 49-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka in view of Morgan et al (Morgan) USPAT 6,068,227.

As to claims 3, 6, and 10, Hatanaka discloses the system of claim 1.

Hatanaka does not explicitly disclose a system wherein the transparent panel comprises a glass panel, wherein the anti-glare front surface comprises a surface
Texture.

Morgan teaches that a glass panel may be installed on the viewer side of a display with an etched outer surface or any other suitable anti-glare treatment to achieve desired anti-glare performance (col. 3, lines 27 through 37) which would result in a system wherein the bulk diffuser is configured per Applicant's enabling disclosure and would therefore reduce undesirable optical effects caused by the surface texture.

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Morgan is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to use an etched glass transparent panel as having art recognized suitability for the intended purpose of achieving desired anti-glare performance (MPEP 2144.07).

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Hatanaka with the etched glass transparent panel of Morgan to achieve desired anti-glare performance.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka and Morgan in view of Varaprasad et al (Varaprasad) USPAT 6,087,012.

As to claim 7, Hatanaka and Morgan disclose the system of claim 6.

Hatanaka and Morgan does not explicitly disclose a chemically etched surface.

Varaprasad discloses in the Background of the Invention that chemical etching of the outer surface of a glass substrate is one way of forming an anti-glare surface known in the prior art (col. 1, lines 28-52).

Varaprasad is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to use a chemically etched glass transparent panel as having art recognized suitability for the intended purpose of achieving desired anti-glare performance (MPEP 2144.07).

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Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Hatanaga and Morgan with the chemically etched glass transparent panel of the prior art cited by Varaprasad to achieve desired anti-glare performance.

4. Claims 12, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka in view of Sanelle et al (Sanelle) USPAT 6,181,394 B1.

As to claims 12, 13, and 14, Hatanaka discloses the system of claim 1.

Hatanaka does not explicitly disclose a system comprising an index-matched bond material disposed between the bulk diffuser and at least one of the display screen and the transparent panel, wherein the index-matched bond material is substantially bubble-free, and wherein the index-matched bond material comprises an epoxy.

Sanelle teaches the use of an index-matched bond material (col 5, line 56 through col. 6, line 2) wherein the index-matched bond material has no air gaps (Applicant's substantially bubble-free) (col. 6, lines 1-2), and wherein the index-matched bond material comprises an epoxy (col. 5, lines 66 and 67) to eliminate unwanted refractions and thereby improve display performance.

Sanelle is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add an index-matched bond material wherein

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the index-matched bond material is bubble-free, and wherein the index-matched bond material comprises an epoxy, to eliminate unwanted refractions and thereby improve display performance.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of Hatanaka with the index-matched bond material wherein the index-matched bond material is bubble-free, and wherein the index-matched bond material comprises an epoxy of Sanelle, to eliminate unwanted refractions and thereby improve display performance.

Response to Arguments

5. Applicant's arguments filed on 19 March 2003 have been fully considered but they are not persuasive.

Applicant's ONLY arguments are as follows:

(1) Examiner has not provided grounds for rejection of claim 11 and consequently a Final Rejection would be improper.

(2) Regarding claims 1, 2, 5, 11, and 15, the polarizer of Hatanaka is neither transparent in color nor transparent to light transmission. Therefore Hatanaka is missing at least the element of a transparent panel.

(3) Regarding claims 3, 6, and 10, there is no motivation or suggestion to combine the etched anti-glare treatment of Morgan with the polarizer of Hatanaka.

(4) Hatanaka teaches away from the Morgan reference.

- (5) Combining Morgan to Hatanaka would result in an inoperable device.
- (6) Regarding claim 7, Hatanaka teaches away from Varaprasad.
- (7) Regarding claims 12, 13, and 14, it would not be obvious to combine Sanelle.

Examiner's responses to Applicant's ONLY arguments are as follows:

(1) It is respectfully pointed out that claim 11 is listed as rejected on PTO 326 of Paper No. 7. Also, the exact recitations of claim 11 are considered and rejected under 102(e) on Page 4, lines 4 and 5, of the Non-Final Rejection of Paper No. 7. Mere lack of listing claim 11 in said 102(e) rejection is a typographical omission, not a failure to reject, so a Final Rejection is proper. Examiner thanks Applicant for pointing out that omission which is corrected in the instant Final Rejection.

(2) It is respectfully pointed out that "Transparent" does not mean totally clear, color free, and free from attenuation or polarization or even retardation. "Transparent" is broadly interpreted as transmitting light so that objects or images beyond can be clearly perceived (typical definition as can be found in most any common dictionary). For example, the lenses of a pair of blue polarizing sunglasses are transparent, if they were not, people would not be able to see through them. Similarly, the display device of Hatanaka would not work if the polarizer were not transparent. Also, "panel" is broadly interpreted as a layer, sheet, slab, lamina, plate, etc. Therefore, the polarizing layer of Hatanaka meets the broad claim of a transparent panel per rejection above. Please note: these are not new grounds of rejection, but merely explanations of the original Non-Final Rejections of Paper No. 7.

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(3) It is respectfully pointed out that Hatanaka discloses a polarizer, 11 (Applicant's transparent panel), having a backside and an anti-glare front surface configured to diffuse ambient light comprising an anti-reflective layer disposed on the anti-glare front surface (col. 8, lines 1-6). There does not need to be any motivation or suggestion to combine an anti-glare surface of Morgan with the polarizer of Hatanaka, because Hatanaka discloses an anti-glare surface per 102(e) rejection above. Morgan is applied to merely to show that etching glass is *inter alia* an art-recognized means suitable for the intended purpose of forming the anti-glare surface of Hatanaka. The resulting structure meets Applicant's enabling disclosure for all the limitations of claims 3, 6, and 10, per rejection above.

(4) It is respectfully pointed out that Hatanaka specifically teaches undulations as disclosed in a specific prior art. Applicant has not established that the undulations of that prior art are a structure functionally equivalent to the etched surface of Morgan. Also, Morgan teaches that an etched glass surface is suitable. In this case, because Hatanaka teaches an anti-glare surface, it is only required that the secondary reference, Morgan, teach art-recognized suitability for the intended purpose of Hatanaka, per rejections above.

(5) It is respectfully pointed out that transparent panels of plastic and glass are well known in the art of liquid crystals and those of ordinary skill in the art of liquid crystals would find all the teachings needed in Hatanaka in view of Morgan to select plastic or glass panels, with or without polarization, as desired to make a functional device. Please note: in considering the disclosure of a reference, it is proper to take

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into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01). Examiner maintains that one skilled in the art would reasonably be expected to draw everything needed to comprise Applicant's claimed invention given Hatanaka in view of Morgan.

(6) It is respectfully pointed out that Hatanaka specifically teaches undulations as disclosed in a specific prior art. Applicant has not established that the undulations of that prior art are a structure functionally equivalent to the etched surface of Varaprasad. Also, Varaprasad teaches that chemically etched glass is suitable. In this case, because Hatanaka teaches an anti-glare surface, it is only required that the secondary reference, Varaprasad, teach art-recognized suitability for the intended purpose of Hatanaka in view of Morgan, per rejections above.

(7) It is respectfully pointed out that Sanelle teaches the use of an index-matched bond material (col 5, line 56 through col. 6, line 2) wherein the index-matched bond material has no air gaps (Applicant's substantially bubble-free) (col. 6, lines 1-2), and wherein the index-matched bond material comprises an epoxy (col. 5, lines 66 and 67) to eliminate unwanted refractions and thereby improve display performance.

Clearly Sanelle teaches ample reason, suggestion, and motivation to modify Hatanaka to eliminate unwanted refractions and thereby improve display performance, per rejections above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (703) 305-0418. The examiner can normally be reached on Monday through Thursday.

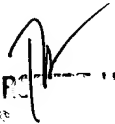
~~If attempts to reach the examiner by telephone are unsuccessful, the examiner's~~
supervisor, Robert H Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

Timothy L Rude
Examiner
Art Unit 2871

TLR
July 10, 2003


SUPERVISOR
TECHNICAL
EXAMINER
JUL 10 2003